REMARKS

In the latest Office Action, claims 1, 2, 3, 8, 10, 15, 17, 22-24, 25, and 27-29 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manson (US 6,248,689) in view of Kim (newly cited; U.S. Patent Application Publication No. US 2003/0104932). Claims 4 and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manson in view of Kim and further in view of Murachi et al. (5,746,989). Claims 5 and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manson in view of Kim and further in view of Andreasson et al. (WO 99/39809). Claims 6 and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manson in view of Kim and further in view of Khair et al. (US 6,293,096). Claims 7 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manson in view of Kim and further in view of design choice. Claims 9 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manson in view of Kim and further in view of Yoshimoto et al. (JP 02-056250). Claims 12-14 and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manson in view of Kim and further in view of Cooper (US 4,902,487) and design choice.

Kim teaches an oxidation catalyst for purifying diesel engine exhaust gas which comprises platinum or palladium on a carrier comprised of a zirconia-silica composite oxide or a zirconium-titanium composite oxide. However, applicants submit that the present invention was conceived prior to May 16, 2001, the effective filing date of the Kim publication. Enclosed with this response is a declaration under 37 CFR §1.131 which shows that the invention was conceived and reduced to practice prior to the effective filing date of Kim. The declaration demonstrates that, prior to the effective filing date of Kim, the inventors developed a catalyst formulation for promoting low-temperature oxidation of nitric oxide (NO) to nitrogen dioxide (NO_2) in the exhaust from diesel engines.

Accordingly, Kim is not prior art and cannot form the basis for the rejections under §103. As Kim no longer constitutes prior art with respect to the claimed invention, all of the above rejections must fail.

Claim 26 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Twigg et al. (US 6,294,141) in view of Deeba et al. (US 6,375,910). The Examiner maintains that Deeba et al. teach an oxidation catalyst comprising platinum on a support material such as zirconia-silica, referring to col. 3, lines 8-17. As applicants previously pointed out to the Examiner, this teaching actually refers to Campbell et al., U.S. Patent No. 5,451,558. Also as previously pointed out, there is no teaching in either Deeba et al. or Campbell of using a support comprising zirconia-silica having strong acid sites as claimed. Rather, Deeba et al. and Campbell et al. teach the use of highly basic NOx adsorption components such as alkali and alkaline earth carbonates, alkaline earth metals, etc. (see Deeba et al., col. 5, and Campbell et al., col. 3, lines 17-22). Neither Deeba et al. nor Campbell et al. teach or suggest a desire for a support having strong acid sites.

Nor would it have been obvious to use the oxidation catalyst of Deeba et al. as the first oxidation catalyst in Twigg et al. Twigg et al. teach that the first catalyst should be supported on a metal monolith, not a ceramic support as claimed. Accordingly, even if one were to combine the teachings of the references, the claimed system would not result. Claim 26 is clearly patentable over the cited references.

For all of the above reasons, applicants submit that claims 1-20 and 22-29 are patentable over the cited references. Early notification of allowable subject matter is respectfully requested.

Respectfully submitted,

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